North American Drought Monitor – April 2006

CANADA: Much of the agricultural landscape of Canada was beginning the growing season with near normal or otherwise positive growth prospects. Atlantic Canada reported below-average streamflow and groundwater levels, which were causing minor water supply concerns. April precipitation may be expected to alleviate short-term concerns. In Alberta, the Peace River and Northwest agricultural regions were still in a moderate drought status.

Surplus moisture in east central and northeast Saskatchewan, central and eastern Manitoba and some areas of Quebec was delaying operations. Much of southern Ontario received gentle rains during May.

The fire weather index was above average in the Peace River Region of Alberta and British Columbia, much of Ontario, eastern Quebec and New Brunswick. The number of fires was significantly above average in the provinces of BC, Alberta, New Brunswick and Nova Scotia.

UNITED STATES: Abundant rains eased drought across the eastern Great Plains and Mississippi Valley, while deficient rains and above-normal warmth intensified drought from northern Texas into Colorado and western Kansas. Dryness also led to drought development along the Gulf of Mexico coast. Persistent rains, often accompanied by severe weather, eliminated D2 to D1 drought in Illinois and Iowa, and also diminished drought in Missouri and eastern Kansas. Thanks largely to heavy rains during the last days of the month, drought eased from eastern Oklahoma into northern Texas. Southern Texas endured below-normal rainfall once again this month.

Drought expanded over eastern Colorado, as D0 transitioned to D1 to D2 levels. D3 in the northern Panhandle of Texas expanded farther into western Oklahoma. Dry vegetation increased fire danger, and strong winds early in April whipped up wildfires in the Texas Panhandle near Amarillo. A mid-month heat wave aggravated dryness in the Plains around mid month, with temperatures breaching 38 degrees C (100 degrees F) in northern Texas on the 17th. The abnormal temperatures made this the warmest April in 112 years of record-keeping in Texas and Oklahoma, according to preliminary data. New Mexico, Kansas, Missouri, Arkansas, and Tennessee notched their second warmest April. The drought continued to have a major impact on winter crops in the southern Plains. Texas winter wheat condition stood at 80% poor to very poor as of May 1, and Oklahoma wheat stood at 76%.

Lack of widespread precipitation led to expansion of D3 in Arizona and New Mexico, while D4 drought developed in southeastern Arizona. Tucson's year-to-date rainfall totaled just 14% of normal. To the east, a dearth of moisture resulted in continued D4 drought in southern Texas. Brownsville recorded only 25% of its normal rainfall from January through April. This comes on the heels of the city's driest calendar year since 1953. Drought developed over southern Louisiana, southern Mississippi, the Panhandle of Florida, and Florida's southwest peninsula, although heavy rains late in the month

offered significant relief along the Gulf Coast, as well as the lower Mississippi Valley and southern Plains.

Dry weather worsened the wildfire danger over the Florida peninsula, and by early May thousands of acres were ablaze. No measurable rain fell in Naples, Florida, during April for only the fourth time in the last 65 years. Year-to-date rainfall totaled just 35% of normal in Fort Myers and 36% of normal in Orlando.

MEXICO: Nationwide, April is the second driest month in México with a climatological precipitation average of 19 mm (0.75 inches, defined for the period 1941-2005). The nationwide areally averaged precipitation for April 2006 was 10.2 mm (0.40 inches), which represents 46% below the long-term average. The Mexican Weather Service (SMN) ranked April 2006 as the 13th driest April during the period 1941-2006. On a national level, January to April 2006 was ranked as the 5th driest such period since 1941, while for the state of Sonora the same period was the driest since 1941 and it was 4th for the state of Sinaloa. The largest wintertime rainfall deficits (1st of October 2005 to 30th of April 2006) were observed in Northwest (Sonora), Balsas (portions of Estado de México, Puebla, Morelos and Guerrero states) and Pacífico Norte (Sinaloa) National Water Commission (CAN) administrative regions, with a rainfall anomaly of 91%, 88% and 86% below normal, respectively.

Most of April was very dry, particularly in northwest and western Mexico. During the month, cold front events produced some rains in the northern portion of the Baja California peninsula. A prefrontal trough over northern and central Mexico favored a short period of rains at the end of April. During the first days of May, the CNA reported that water supplies for agriculture and municipal uses continued to generally decline, the sharpest declines reported in dams located in northwest (Sonora, Sinaloa, Nayarit, Chihuahua and Durango) and northeast Mexico (Nuevo León and Tamaulipas).

During April, drought intensity continued increasing across northwestern México. Changes for April included the expansion of extreme drought conditions (D4) in portions of southeast Chihuahua, western Durango and southern Sinaloa, where agriculture and hydrological impacts (AH) are reported. Drought conditions also increased in northeastern Mexico along the border between Texas and Tamaulipas, where categories D1 to D3 moved southward on the Mexican side. Both areas where drought increased (northwest and northeast Mexico) are well reflected in NOAA's soil moisture analysis. Conditions in central Mexico remain almost unchanged with the Lerma-Chapala basin as the most affected area with extreme drought conditions (D3). The only change in southeastern Mexico was the introduction of the D0 category over the Yucatan peninsula.